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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,484	05/02/2001	Yaakov Navon	6727/0J281US0	6242

7590 02/28/2003  
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EXAMINER

LEE, SEUNG H

ART UNIT PAPER NUMBER

2876

DATE MAILED: 02/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/847,484

Applicant(s)

NAVON, YAAKOV

Examiner

Seung H Lee

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-14, 25-29 and 38-42 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7, 9, 15, 16, 21, 23, 24, 30, 31 and 36 is/are rejected.
- 7) ☒ Claim(s) 3-6, 8, 17-20, 22, 32-35 and 37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 7, 9, 15, 16, 21, 23, 30, 31, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Li et al. (US 5,504,319)(hereinafter referred to as 'Li').

Li teaches a method for barcode acquisition comprising capturing image using low resolution scanner (110), dividing an image into a plurality of windows or tiles using a digital signal processor (DSP (112)), scanning or determining the each of windows to detect a pattern of stripes that is irrespective to the angle of orientation of the barcode, i.e., Contrast Testing (fig. 7), Balance Test (fig. 8), Transition Count Test (fig. 9), analyzing the pattern of stripes to determine the angle of orientation of the barcode using the Orientation Estimation (fig. 11) wherein the Orientation Estimation is defining bounds of the barcode by calculating the slope and aiming line of the barcode (280) from the DSP wherein the DSP is analyzing each and every cluster of windows (244) then defining a shape of cluster, e.g., horizontal bar code (246), the DSP also calculating both ends of cluster of each row, i.e., left-most and right-most column of the barcode, reading the barcode using the result of Orientation Estimation (see Figs. 1-11; col. 2, line 47- col. 6, line 38).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Li in view of Zlotnick et al. (US 5,737,439)(hereinafter referred to as 'Zlotnick').

The teachings of Li have been discussed above.

Although, Li teaches the method and system for identifying the location and orientation of the barcode on the package, he fails to teach or fairly suggest that decoded information is used for sorting the packages.

However, Zlotnick teaches parcels sorting system using information/data in which is extracted using an image capturing system (see col. 2, line 19-42; col. 7, lines 55-58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Zlotnick to the teachings of Li in order to provide an improved and an enhanced system means for accelerating sorting of parcels within the sorting facility adapting automation procedure. Moreover, such modification would reduce miss sorting of parcels means for reading information/data of the barcode precisely/accurately using the location and orientation of the barcode on the parcels, and therefore an obvious expedient.

***Allowable Subject Matter***

5. Claims 10-14, 25-29, and 38-42 are allowed.
6. Claims 3-6, 8, 17-20, 22, 31-35, and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Although, the best prior art of record to Li and Zlotnick teaches a sorting system comprising barcode acquisition system for analyzing location and orientation of the barcode on parcels. However, Li and Zlotnick taken alone or in combination of other references, fail to specifically teach or fairly suggest that a method and system for scanning each and every tile on in a first scan direction to detect the stripes in the tile that are crossed by the first line and scanning in a second direction through the tile in diagonal to the first direction to detect the stripes in the tile that are crossed by the second line, and defining the bounds of the barcode comprising finding extreme lines of the barcode corresponding to first and last ones of the stripes of the barcodes wherein locating the ends of the stripes comprising scanning of the intermediate the first and last stripes in direction parallel to the extreme lines as set forth in the claims.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure;

Chandler et al. [US 5,296,690] and Saporetti [US 6,047,893] disclose a method of locating and determining the orientation of the code,

Au et al. [US 6,490,376] discloses a skew processing of raster scan images.


Any inquiry concerning this communication or earlier communication from the examiner should be directed to Seung H. Lee whose telephone number is (703) 308-5894. The examiner can normally be reached on Monday to Friday from 7:30 AM to 4:00 PM.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (703) 305-3503. The fax-phone number for this group is (703) 308-5841 or (703) 308-7722.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [michael.lee@uspto.gov].

*All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.*

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

  
Seung H. Lee  
Art Unit 2876  
February 21, 2002



KARL D. FRECH  
PRIMARY EXAMINER